

Hex Support Pins

Flat

Locating Pins/Bushings for Locating Pins

Hex Support Pins – Flat

Type		Material	Surface Treatment	Hardness
Threaded	Tapped			
SRTAB	SRTBB	1045 Carbon Steel or Equivalent	Black Oxide	Plating Hardness 750 min
SRTAR	SRTBR		Hard Chrome Plating Plating Thickness: 3 μm or More	
SRTAHB	SRTBHB		Black Oxide	
SRTAHR	SRTBHR		Hard Chrome Plating Plating Thickness: 3 μm or More	
SRTASU	SRTBSU		304 Stainless Steel	
SRTAC	SRTBC	440C or 420 Stainless Steel	—	Treated Hardness: 50–55 HRC

Threaded

Tapped

RoHS10

When G < Pitch x 2, the incomplete threaded section (Pitch x 2) is included in M x 1.5. Pitch Diameter P4010

Type	Part Number	Material Code	B	L 0.01 mm Increment	G 1 mm Increment Threaded Type only	(C)	d	M (Coarse)	M ₁ (Coarse)
Threaded	A (Threaded)	B	6	10.00–50.00	0 or 2 ≤ G ≤ dx2	6.9	4	M4	M3
			7						
Tapped	B (Tapped)	R	8	15.00–50.00	0 or 2 ≤ G ≤ dx2	8.1	5	M5	M4
			9						
Threaded	A (Threaded)	HB	10	20.0–80.00	0 or 2 ≤ G ≤ dx2	9.2	6	M6	M5
			11						
Tapped	B (Tapped)	HR	12	20.0–80.00	0 or 2 ≤ G ≤ dx2	11.5	8	M8	M6
			13						
Threaded	A (Threaded)	SU	14	20.0–80.00	0 or 2 ≤ G ≤ dx2	13.9	10	M10	M8
			15						
Tapped	B (Tapped)	C	16	20.0–80.00	0 or 2 ≤ G ≤ dx2	15	10	M10	M8
			17						
Threaded	A (Threaded)	C	18	20.0–80.00	0 or 2 ≤ G ≤ dx2	16.2	10	M10	M8
			19						
Tapped	B (Tapped)	C	20	20.0–80.00	0 or 2 ≤ G ≤ dx2	19.6	10	M10	M8
			21						
Threaded	A (Threaded)	C	22	20.0–80.00	0 or 2 ≤ G ≤ dx2	21.9	10	M10	M8
			23						
Tapped	B (Tapped)	C	24	20.0–80.00	0 or 2 ≤ G ≤ dx2	27.7	10	M10	M8
			25						

440C or 420 Stainless Steel is B=8. For full thread, specify a G dimension of 0 and NNC alteration.

Part Number Example

Type	Shape	Materials	B	L	G
SRT	A	B	8	L20.00	G6
SRT	B	SU	12	L50.00	G6

Part Number Alterations

Part Number	L	G	(DRC, NNC)
SRTAB10	L30.00	G3	DRC

Alterations	Screwdriver Slot	Undercut
Code	DRC	NNC
Spec.	Machines a screwdriver slot of width 0.8 mm and depth 1 mm.	Adds a relief at the thread end. Applicable when G=0.

Application Example

Features: Due to the hex shape, adjusting height with a wrench is easy.



Locating Pin for Jigs & Fixtures

Precision with Shoulder

Features: For Precision Grade, P dimension tolerance is $^{+0.01}$ or $^{-0.02}$ (for Standard Grade, $^{+0.05}$), concentricity is 0.01 or 0.02 (for Standard Grade, 0.03 or 0.05).

Threaded

Type	Material	Hardness
LANAN	Round 4137 Alloy Steel	Hardened 35–40 HRC min.
LANDN	Diamond	—
TLANAN	Round SCM415 Alloy Steel (JIS)	Carburized 55 HRC min. (Depth 0.7–0.8) Anti-Carburizing on Threads
TLANDN	Diamond	—

Reference: $\sin 15^\circ = 0.259$, $\tan 15^\circ = 0.267$

Hardened / Carburized / Chrome Plated

Dicoat® / TiCN Treatment

1 Dicoat® Treated / TiCN Thread Shape

$e = P/2 \tan 15^\circ + R - (R/\sin 15^\circ)$

2 Dicoat® Treated / TiCN Treated items do not come with a center hole.

3 Dicoat® Treated / TiCN items will have the () precision and Thread Shape will be 1.

Surface Finish Relief: R0.2

Type	Material	Hardness	P 0.1 mm Increment	B 1 mm Increment	L Selection		ℓ ₁	H	R	W	
					5	8 10					
Hardened (Round)	LANAN	—	6	-0.004 to -0.012	3.0–8.0	5	8 10	6	9	1	1–2
			8	-0.005 to -0.014	3.0–10.0	5	8 10 12 15	10	11	1.5	
(Diamond)	LANDN	—	10T	-0.005 to -0.014	4.5–12.0	(5)	(8) 10 12 15	12	13	2	1–3
			12	-0.006 to -0.017	9.0–14.0	(8)	10 12 15 18	15	15	3	
(Diamond)	TLANDN	—	16	-0.006 to -0.017	13.0–18.0	(10)	12 15 18 20	18	19	4	5

W Dimension D6, D8: W=2 when P>5.0 D10, 10T: W=1 when P<5.0, W=2 when 5.0 ≤ P ≤ 7.0, W=3 when P>7.0. L dimension in () is not applicable to Diamond Shape, Dicoat® and TiCN treatment. B Dimension 5 mm – will be selected for Dicoat® Treated / TiCN Treated items.

Set Screw Type

Type	Material	Hardness
LATAN	Round 4137 Alloy Steel	35–40 HRC min.
LATDN	Diamond	—
TLATAN	Round SCM415 Alloy Steel	Carburized 55 HRC min. (Depth 0.7–0.8) Anti-Carburizing on Thread
TLATDN	Diamond	—

Reference: $\sin 15^\circ = 0.259$, $\tan 15^\circ = 0.267$

Hardened / Carburized / Chrome Plated

Dicoat® / TiCN Treatment

$e = P/2 \tan 15^\circ + R - (R/\sin 15^\circ)$

Surface Finish Relief: R0.2

Type	Material	Hardness	P 0.1 mm Inc.	B 1 mm Increment	L	ℓ ₁	H	d	R	Applicable Set Screw	W	
												8
Hardened (Round)	LATAN	—	6	-0.004 to -0.012	3.0–8.0	8	8	4	1	M5	1–2	
			8	-0.005 to -0.014	3.0–10.0	8	11	5	1.5			
(Diamond)	LATDN	—	10T	-0.005 to -0.014	4.5–12.0	5	10	7	2	M6	1–3	
			12	-0.006 to -0.017	9.0–14.0	12	15	9	3	M8		
(Diamond)	TLATDN	—	16	-0.006 to -0.017	13.0–18.0	12	10	15	9	3	M8	4
			16	-0.006 to -0.017	13.0–18.0	16	19	13	4	M8	5	

W Dimension D6, D8: W=2 when P>5.0 D10, 10T: W=1 when P<5.0, W=2 when 5.0 ≤ P ≤ 7.0, W=3 when P>7.0. B Dimension 5 mm – will be selected for Dicoat® Treated / TiCN Treated items.

Part Number Example

Type	D	P	B	L
LANAN	8	P5.0	B15	L10
LATAN	6	P6.8	B14	L10

Part Number Alterations

Type	D	P	B	L	(KC, KD, SC, MC)
LANAN	10	P4.5	B10	L5	KD

Alterations	Grooves for Wear Sign	Flat Position	Flat Machining	Wrench Flats	Thread Diameter	Thread Length	Upper Relief Radius Change
	Code	MK	KC	KD	SC	MC	FC
Spec.	Machine 4 grooves on B Dimension. The wear and tear of the grooves indicate the degree of wear. Applicable to Hardened, Carburized and Round Shape Products only. Applicable when B ≥ 4. When used together with RTC, the groove starts from the area of R value + 1 mm. Groove Depth: 0.2mm (±0.06 mm) Groove Shape: V Groove (90°)	Ordering Code: KC Changes the flat position to 90° from the standard position 0°. Applicable to Diamond Shape Type only.	Ordering Code: KD Machining on one side. H-P ≥ 2. Applicable to Round Shape Type only.	Ordering Code: SC Adds wrench flats. H 9 11 13 15 19 H 7 8 11 13 17. Applicable to Round Shape Type only.	Ordering Code: MC8 Changes the thread diameter. D/3 ≤ M < D Mmin3. Applicable to Threaded Type only.	Ordering Code: FC15 Changes the thread length. FC=1 mm increment D6–10: M=FC±Mx3 D12–16: M=FC±Mx2.5 D20: M=FC±Mx2. Applicable to Threaded only. Not applicable to Dicoat® and TiCN treatment.	Ordering Code: RTC1 Changes the relief to the following radius R. Selection: R1 R2 R3. RTC ≤ (H-P)/2. Applicable when B ≥ 5.

Locating Pins/Bushings for Locating Pins